



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,133	01/29/2002	Jean-Michel Dubus	34052	5547

20985 7590 09/03/2003
FISH & RICHARDSON, PC
4350 LA JOLLA VILLAGE DRIVE
SUITE 500
SAN DIEGO, CA 92122

7
EXAMINER

DEL SOLE, JOSEPH S

ART UNIT	PAPER NUMBER
----------	--------------

1722

DATE MAILED: 09/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

*Remailed
address
incorrect*

Office Action Summary

Application N .

10/009,133

Applicant(s)

DUBUS ET AL

Examiner

Joseph S. Del Sole

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

2. The information disclosure statement (PTO-1449) filed 10/22/2001 complies with the provisions of 37 CFR 1.97, 1.98 and MPEP 609. It has been placed in the application file and the information referred to therein has been considered as to its merits.

Drawings

3. Figure 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. Page 8, lines 10-11 state that Figure 3 shows the "general structure of a drawing slot" which indicates that it is old.

Specification

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in

Art Unit: 1722

upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading, or the section heading may be left out of the specification entirely:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

4. The disclosure is objected to because of the following informalities: a) the specification must include appropriate subject headings as discussed above.

Appropriate correction is required.

5. The disclosure is objected to because the quality of the text is poor and many words are illegible. The Applicant must correct the multitude of errors created by an apparent poor photocopying of the disclosure by replacing each of the paragraphs in the disclosure containing an error or replacing the entire disclosure. If the Applicant

Art Unit: 1722

chooses to submit a substitute specification, the Applicant must be sure to follow 37 CFR 1.125. This includes, but is not limited to, a) submitting a statement that the substitute specification includes no new matter; b) submitting a marked up version of the substitute specification showing all the changes (including the matter being added to and the matter being deleted from) to the specification of record and c) submitting the substitute specification in clean form without markings as to amended material.

Appropriate correction is required.

Claim Objections

6. Claim 16 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim (in short, it's dependent on a claim that has been cancelled). Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form (namely, change its dependence to one of a non-cancelled claim), or rewrite the claim(s) in independent form. For purposes of advancing the prosecution of the application, the Examiner will treat the embodiments of claim 16 as being dependent on claim 11, since claim 11 is the claim most similar to original claim 3.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1722

Claim 16 is vague and indefinite because, since claim 3 has been cancelled, it is impossible to determine the metes and bounds of "an installation according to claim 3".

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 9 and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Balk (4,820,142).

Balk teaches an installation having an extruder feeding to a spinneret (Fig 1, #3), cooling means including a cooling zone (Fig 1, #12 and #13); a filament-drawing assembly (Fig 1, #5) including a suction device comprising a narrow chamber of rectangular cross section; the chamber has a chamber outlet (Fig 1); distributing means (Fig 1, #6) for distributing over a receiving belt; the extruding means, cooling means, filament-drawing assembly and distributing means are separately controllable (the extruding means extrudes independently of the cooling, drawing and distributing structures: col 3, lines 1-20; the cooling means is adjustable: col 3, lines 15-25; the filament-drawing assembly and the distributing means have pivotal flaps: col 2, lines 10-

35, col 3, lines 25-60); the cooling zone has an assembly having a plurality of successive zones (Fig 1, # 12 and #13) for transverse air current (the limitation "the speed and temperature of which may be adjusted independently in each of the zones" is a process limitation and does not further limit the structure of the apparatus as claimed, however Balk does anticipate temperature control: col 3, lines 10-25); the suction device has a suction slot (Fig 1, #16), the width of which may be adjusted automatically (col 3, lines 30-45); and the distributing means is spaced from the filament drawing assembly (Fig 1; while the two are contiguous, they are not over lapping and are therefore spaced) and has an assembly which laterally deflects the air flow (Fig 1, #18; also the limitation "reducing the speed thereof and that of the filaments, and facilitating the uniform deposition on the receiving belt by eliminating any rebound at the moment of this deposition" is a process limitation and does not further limit the structure of the apparatus as claimed, however Balk's apparatus is capable of this).

11. Claims 9-10 and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Geus et al (5,460,500).

Geus et al teach an installation having an extruder feeding to a spinneret (Fig 1, #2), cooling means including a cooling zone (Fig 1, #3); a filament-drawing assembly (Fig 1, #4) including a suction device comprising a narrow chamber of rectangular cross section; the chamber has a chamber outlet (Fig 1); distributing means (Fig 1, #5) for distributing over a receiving belt; the extruding means, cooling means, filament-drawing assembly and distributing means are separately controllable (col 4, lines 25-65, Figs 1 and 5); the cooling means and the filament-drawing assembly each comprise a plurality

Art Unit: 1722

of elementary modules placed side by side (Fig 3 and Fig 5); the suction device has a suction slot (Fig 1, #4), the width of which may be adjusted automatically (col 4, lines 57-61); and the distributing means is spaced from the filament drawing assembly (Fig 1) and has an assembly which laterally deflects the air flow (Fig 1 also the limitation "reducing the speed thereof and that of the filaments, and facilitating the uniform deposition on the receiving belt by eliminating any rebound at the moment of this deposition" is a process limitation and does not further limit the structure of the apparatus as claimed, however Balk's apparatus is capable of this).

12. Claims 9-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Najour et al (6,379,136).

Najour et al teach an installation having an extruder feeding to a spinneret (Fig 1, #2), cooling means including a cooling zone (Fig 1, #s 24a-c); a filament-drawing assembly (Fig 1, #s 27 and 51) including a suction device comprising a narrow chamber of rectangular cross section; the chamber has a chamber outlet (Fig 1); distributing means (Fig 6, #s 15 and 59) for distributing over a receiving belt; the extruding means, cooling means, filament-drawing assembly and distributing means are separately controllable (Figs 1 and 6, the arrows show control of the structures and col 10, lines 15-25 and col 10, lines 60-65); the cooling means and the filament-drawing assembly comprise a plurality of elementary modules placed side by side (Fig 1, #s 24a-c for the cooling means and Fig 1, #s 27, 51 and 56 for the filament drawing assembly), the distributing means extending along the entire width of the web produced (Fig 1); the cooling zone has an assembly having a plurality of successive zones (Fig 1, #s 24a-c)

Art Unit: 1722

for transverse air current (the limitation "the speed and temperature of which may be adjusted independently in each of the zones" is a process limitation and does not further limit the structure of the apparatus as claimed, however Najour et al do anticipate temperature control: col 10, lines 60-55); the suction device has a suction slot (Fig 1, #8), the width of which may be adjusted automatically (Fig 1, see arrows); and the distributing means is spaced from the filament drawing assembly (Fig 1) and has an assembly which laterally deflects the air flow (Fig 1; also the limitation "reducing the speed thereof and that of the filaments, and facilitating the uniform deposition on the receiving belt by eliminating any rebound at the moment of this deposition" is a process limitation and does not further limit the structure of the apparatus as claimed, however Najour et al's apparatus is capable of this).

13. Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipate by Geus et al (5,800,840).

Geus et al teach an installation having an extruder feeding to a spinneret (Fig 1, #21), cooling means including a cooling zone (Fig 1, #5); a filament-drawing assembly (Fig 2, #8 and #9) including a suction device comprising a narrow chamber of rectangular cross section; the chamber has a chamber outlet (Fig 2); distributing means (Fig 1, #3) for distributing over a receiving belt; the extruding means, cooling means, filament-drawing assembly and distributing means are separately controllable (Fig 1, #s 20, 22, 30 and 33 allow independent control of the named structures).

14. Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipate by Profe et al (5,599,488).

Art Unit: 1722

Profe teaches an installation having an extruder feeding to a spinneret (Fig 1, #20), cooling means including a cooling zone (Fig 1, #21); a filament-drawing assembly (Fig 1, #2) including a suction device comprising a narrow chamber of rectangular cross section; the chamber has a chamber outlet (Fig 1); distributing means (Fig 1, #5) for distributing over a receiving belt; the extruding means, cooling means, filament-drawing assembly and distributing means are separately controllable (Fig 1).

15. Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipate by Geus et al (5,814,349).

Geus et al teach an installation having an extruder feeding to a spinneret (Fig 1, #2), cooling means including a cooling zone (Fig 1, #3); a filament-drawing assembly (Fig 1, #4) including a suction device comprising a narrow chamber of rectangular cross section; the chamber has a chamber outlet (Fig 1); distributing means (Fig 1, #7) for distributing over a receiving belt; the extruding means, cooling means, filament-drawing assembly and distributing means are separately controllable (Fig 1).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 1722

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

18. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

19. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over any of Balk (4,820,142), Geus et al (5,460,500), Najour et al (6,379,136) in view of Trimble et al (5,397,413).

Balk, Geus et al and Najour et al teach the invention of claim 13 as discussed above.

Balk, Geus et al and Najour et al fail to teach the distributing means having an assembly which electrostatically charges filaments before deposition on the receiving belt.

Tremble et al teach a distributor incorporated with a corona device (Fig 2, #18) for the purpose of electrostatically charging filaments so that the filaments repel each other and spread apart as they strike the forming belt (col 7, lines18-56).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of any of Balk, Geus et al and Najour et al with an electrostatic charge inducing distributing means as taught by Trimble et al because it enables the filaments to repel each other for better distribution on a forming belt.

20. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over any of Balk (4,820,142), Geus et al (5,460,500), Najour et al (6,379,136), Geus et al (4,800,840), Profe et al (5,599,488) and Geus et al (5,814,349) in view of Grabowski et al (4,692,106) and Tompkins et al (5,069,850).

Balk, Geus et al ('500), Najour et al, Geus et al ('840), Profe et al and Geus et al ('349) each teach the invention of claim 9 as discussed above.

Balk, Geus et al, Najour et al, Geus et al, Profe et al and Geus et al fail to teach computer means for controlling the extruder means, the cooling means, the filament-drawing assembly and the distributing means.

Grabowski et al teach computer control for cooling means and the walls of a filament drawing means and distributing means (Fig 1, #10) and Tompkins et al teach computer control for a extruder (col 9, line 65 - col 10, line 12) for the purpose of better control of the structures of an apparatus.

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified any of the inventions of Balk, Geus et al ('500), Najour et al, Geus et al ('840), Profe et al and Geus et al ('349) by including a

Art Unit: 1722

computer or computers as taught by Grabowski et al and Tompkins et al because it enables well known increased control over the structures of an apparatus.

21. Claim 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

22. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to teach or suggest that during the start-up phase, the temperature of the air inside each successive one decreases from one zone to the next, increasing the speed of the traversing air progressively, the parameters of the cooling zone being modified in order to increase the air speed in a first successive zone, the temperature remaining unchanged, increase the temperature in a second successive zone to bring it to the level of that of the first zone and increase the air speed in this zone, increase the air temperature in a third successive zone and increase the air speed in this zone, simultaneously, the width of the drawing slot is progressively reduced to attain a nominal operating value, the pressure of the drawing air being progressively increased in combination with the apparatus of claim 11 (which generally contains the structure of original claim 3 as discussed above).

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph S. Del Sole whose telephone number is (703) 308-6295. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Wanda Walker, can be reached at (703) 308-0457. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for both non-after finals and for after finals.

Art Unit: 1722

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Joseph S. Zell

J.S.D.

August 28, 2003

Robert Davis

ROBERT DAVIS
PRIMARY EXAMINER
GROUP 1300 1700

8/29/03